



## Complete Summary

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### TITLE

Chronic obstructive pulmonary disease (COPD): the percentage of all patients with COPD diagnosed after 1 April 2008 in whom the diagnosis has been confirmed by post bronchodilator spirometry.

### SOURCE(S)

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure is used to assess the percentage of all patients with chronic obstructive pulmonary disease (COPD) diagnosed after 1 April 2008 in whom the diagnosis has been confirmed by post bronchodilator spirometry.

### RATIONALE

Chronic obstructive pulmonary disease (COPD) is a common disabling condition with a high mortality. The most effective treatment is smoking cessation. Oxygen therapy has been shown to prolong life in the later stages of the disease and has also been shown to have a beneficial impact on exercise capacity and mental state. Some patients respond to inhaled steroids. Many patients respond symptomatically to inhaled beta agonists and anti-cholinergics. Pulmonary rehabilitation has been shown to produce an improvement in quality of life.

The majority of patients with COPD are managed by general practitioners and members of the primary healthcare team with onward referral to secondary care when required. This measure is one of five [Chronic Obstructive Pulmonary Disease \(COPD\)](#) measures. The Chronic Obstructive Pulmonary Disease (COPD) set focuses on the diagnosis and management of patients with symptomatic COPD.

COPD is diagnosed if:

- The patient has a forced expiratory volume in one second (FEV1) of less than 80% of predicted normal
- And has an FEV1/FVC ratio less than 70%
- And the patient has symptoms consistent with COPD

Spirometry should be performed after the administration of an adequate dose of an inhaled bronchodilator (e.g., 400 mcg salbutamol).

Prior to performing post-bronchodilator spirometry, patients do not need to stop any therapy, such as long acting bronchodilators or inhaled steroids.

All of these elements are required to make the diagnosis of COPD. Routine reversibility testing is not recommended in National Institute for Health and Clinical Excellence (NICE), and the Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines require post bronchodilator spirometry for diagnosis and grading. Failure to use post bronchodilator readings overestimated the prevalence of COPD by 25% (Johannessen et al., *Thorax* 2005; 60(10): 842-847). This change will reduce workload in primary care and removes the conflict with evidence based guidelines.

Where doubt occurs as to whether the diagnosis is asthma or COPD, reversibility testing may add additional information to post bronchodilator readings alone and peak flow charts are useful. It is acknowledged that COPD and asthma can co-exist and that many patients with asthma who smoke will eventually develop irreversible airways obstruction. However, where asthma is present, these patients should be managed as asthma patients as well as COPD patients. This will be evidenced by a greater than 400mls response to a reversibility test and a post bronchodilator FeV1 of less than 80% of predicted normal as well as an appropriate medical history.

Patients with reversible airways obstruction should be included on the asthma register. Patients with coexisting asthma and COPD should be included on the register for both conditions.

## **PRIMARY CLINICAL COMPONENT**

Chronic obstructive pulmonary disease (COPD); post bronchodilator spirometry; forced expiratory volume in one second (FEV1)

## **DENOMINATOR DESCRIPTION**

Patients with chronic obstructive pulmonary disease (COPD) diagnosed after 1 April 2008

## NUMERATOR DESCRIPTION

Number of patients from the denominator in whom the diagnosis of chronic obstructive pulmonary disease (COPD) has been confirmed by post bronchodilator spirometry

**Note:** For the purposes of the Quality Outcomes Framework (QOF), post bronchodilator spirometry undertaken between three months before and twelve months after a diagnosis of COPD being made would be considered as meeting the requirements of this indicator.

## Evidence Supporting the Measure

### EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

### NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Chronic obstructive pulmonary disease. National clinical guideline on management of chronic obstructive pulmonary disease in adults in primary and secondary care.](#)

## Evidence Supporting Need for the Measure

### NEED FOR THE MEASURE

Unspecified

## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

Internal quality improvement  
National reporting  
Pay-for-performance

## Application of Measure in its Current Use

### CARE SETTING

Physician Group Practices/Clinics

**PROFESSIONALS RESPONSIBLE FOR HEALTH CARE**

Physicians

**LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED**

Group Clinical Practices

**TARGET POPULATION AGE**

Unspecified

**TARGET POPULATION GENDER**

Either male or female

**STRATIFICATION BY VULNERABLE POPULATIONS**

Unspecified

**Characteristics of the Primary Clinical Component****INCIDENCE/PREVALENCE**

Unspecified

**ASSOCIATION WITH VULNERABLE POPULATIONS**

Unspecified

**BURDEN OF ILLNESS**

See the "Rationale" field.

**UTILIZATION**

Unspecified

**COSTS**

Unspecified

**Institute of Medicine National Healthcare Quality Report Categories****IOM CARE NEED**

Living with Illness

## **IOM DOMAIN**

Effectiveness

### **Data Collection for the Measure**

## **CASE FINDING**

Users of care only

## **DESCRIPTION OF CASE FINDING**

Patients with chronic obstructive pulmonary disease (COPD) diagnosed after 1 April 2008\*

**\*Note:** The Quality and Outcomes Framework (QOF) includes the concept of exception reporting. This has been introduced to allow practices to pursue the quality improvement agenda and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contraindication or side-effect.

The following criteria have been agreed for exception reporting:

- A. patients who have been recorded as refusing to attend review who have been invited on at least three occasions during the preceding twelve months
- B. patients for whom it is not appropriate to review the chronic disease parameters due to particular circumstances, e.g., terminal illness, extreme frailty
- C. patients newly diagnosed within the practice or who have recently registered with the practice, who should have measurements made within three months and delivery of clinical standards within nine months, e.g., blood pressure or cholesterol measurements within target levels
- D. patients who are on maximum tolerated doses of medication whose levels remain suboptimal
- E. patients for whom prescribing a medication is not clinically appropriate, e.g., those who have an allergy, another contraindication or have experienced an adverse reaction
- F. where a patient has not tolerated medication
- G. where a patient does not agree to investigation or treatment (informed dissent), and this has been recorded in their medical records
- H. where the patient has a supervening condition which makes treatment of their condition inappropriate, e.g., reduction where the patient has liver disease
- I. where an investigative service or secondary care service is unavailable

Refer to the original measure documentation for further details.

## **DENOMINATOR SAMPLING FRAME**

Patients associated with provider

## **DENOMINATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Patients with chronic obstructive pulmonary disease (COPD) diagnosed after 1 April 2008

### **Exclusions**

See the "Description of Case Finding" field for exception reporting.

## **RELATIONSHIP OF DENOMINATOR TO NUMERATOR**

All cases in the denominator are equally eligible to appear in the numerator

## **DENOMINATOR (INDEX) EVENT**

Clinical Condition

## **DENOMINATOR TIME WINDOW**

Time window follows index event

## **NUMERATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Number of patients from the denominator in whom the diagnosis of chronic obstructive pulmonary disease (COPD) has been confirmed by post bronchodilator spirometry

**Note:** For the purposes of the Quality Outcomes Framework (QOF), post bronchodilator spirometry undertaken between three months before and twelve months after a diagnosis of COPD being made would be considered as meeting the requirements of this indicator.

### **Exclusions**

Unspecified

## **MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS**

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

## **NUMERATOR TIME WINDOW**

Fixed time period

## **DATA SOURCE**

Medical record  
Registry data

## **LEVEL OF DETERMINATION OF QUALITY**

Individual Case

## **PRE-EXISTING INSTRUMENT USED**

Unspecified

## Computation of the Measure

### SCORING

Rate

### INTERPRETATION OF SCORE

Better quality is associated with a higher score

### ALLOWANCE FOR PATIENT FACTORS

Unspecified

### STANDARD OF COMPARISON

External comparison at a point in time

Internal time comparison

Prescriptive standard

### PRESCRIPTIVE STANDARD

Payment stages: 40-80%

### EVIDENCE FOR PRESCRIPTIVE STANDARD

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

## Evaluation of Measure Properties

### EXTENT OF MEASURE TESTING

Unspecified

## Identifying Information

### ORIGINAL TITLE

COPD 12. The percentage of all patients with COPD diagnosed after 1 April 2008 in whom the diagnosis has been confirmed by post bronchodilator spirometry.

### MEASURE COLLECTION

[Quality and Outcomes Framework Indicators](#)

### MEASURE SET NAME

## Chronic Obstructive Pulmonary Disease (COPD)

### **DEVELOPER**

British Medical Association  
National Health Service (NHS) Confederation

### **FUNDING SOURCE(S)**

The expert panel who developed the indicators were funded by the English Department of Health.

### **COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE**

The main indicator development group is based in the National Primary Care Research and Development Centre in the University of Manchester. They are: Professor Helen Lester, NPCRDC, MB, BCH, MD; Dr. Stephen Campbell, NPCRDC, PhD; Dr. Umesh Chauhan, NPCRDC, MB, BS, PhD.

Others involved in the development of individual indicators are: Professor Richard Hobbs, Dr. Richard McManus, Professor Jonathan Mant, Dr. Graham Martin, Professor Richard Baker, Dr. Keri Thomas, Professor Tony Kendrick, Professor Brendan Delaney, Professor Simon De Lusignan, Dr. Jonathan Graffy, Dr. Henry Smithson, Professor Sue Wilson, Professor Claire Goodman, Dr. Terry O'Neill, Dr. Philippa Matthews, Dr. Simon Griffin, Professor Eileen Kaner.

### **FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST**

None for the main indicator development group.

### **ENDORSER**

National Health Service (NHS)

### **ADAPTATION**

Measure was not adapted from another source.

### **RELEASE DATE**

2004 Apr

### **REVISION DATE**

2009 Mar

### **MEASURE STATUS**

This is the current release of the measure.



This measure updates a previous version: British Medical Association (BMA), and NHS Employers. Quality and outcomes framework guidance for GMS contract 2008/09. London (UK): British Medical Association, National Health Service Confederation; 2008 Apr. 148 p.

## **SOURCE(S)**

British Medical Association (BMA) and NHS Employers. Quality and outcomes framework guidance for GMS contract 2009/10. London (UK): British Medical Association, National Health Service Confederation; 2009 Mar. 162 p.

## **MEASURE AVAILABILITY**

The individual measure, "COPD 12. The Percentage of All Patients with COPD Diagnosed After 1 April 2008 in Whom the Diagnosis Has Been Confirmed by Post Bronchodilator Spirometry," is published in the "Quality and Outcomes Framework Guidance." This document is available from the [British Medical Association Web site](#).

## **NQMC STATUS**

This NQMC summary was completed by ECRI on April 1, 2006. The information was verified by the measure developer on August 11, 2006. This NQMC summary was updated by ECRI Institute on January 16, 2009. This NQMC summary was updated again by ECRI Institute on September 29, 2009. The information was verified by the measure developer on March 4, 2010.

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